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| In re Patent Application of | ) |
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| Georges R. HARIK et al. | )    Mail Stop **AF** |
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| Application No.: 10/697,333 | )    Group Art Unit: 2626 |
| | ) |
| Filed: October 31, 2003 | )    Examiner: L. Spooner |
| | ) |
| For:   AUTOMATIC COMPLETION OF | ) |
|        FRAGMENTS OF TEXT | ) |

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### PRE-APPEAL BRIEF REQUEST FOR REVIEW

Applicants hereby request that a panel of Examiners formally review the legal and factual basis of the rejection in the above-identified application prior to the filing of an Appeal Brief. Applicants assert that the outstanding rejections are clearly incomplete, improper, and based upon errors in fact.

Claims 1-7, 9-19, 21, 22, 24-32, 41, 43, and 44 are pending. Claims 1-7, 12-19, 21, 22, 24-32 and 43 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Shanahan et al. (U.S. Patent No. 6,820,075) in view of Fernley et al. (U.S. Patent Application Publication No. 2002/0174101); claim 41 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Shanahan et al. in view of Veale (U.S. Patent No. 6,584,470); claim 44 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Shanahan et al. in view of Veale and Fernley et al.; and claims 9-11 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Shanahan et al. in view of Fernley et al. and Risvik (U.S. Patent No. 6,377,945).

Applicants submit that the Examiner's rejections under 35 U.S.C. § 103 are *improper* and based on *factual errors*. The deficiencies that exist in the Examiner's rejection of independent claims 1, 30, 31, and 41 will be addressed below. Similar deficiencies exist with respect to the dependent claims.

With regard to claim 1, Shanahan et al. and Fernley et al. do not disclose or suggest assigning scores to sentence endings, which include text that is located within identified sentences between a text fragment and an end of the identified sentences, based, at least in part, on a location within the identified sentences at which the text fragment occurs, as recited in claim 1. The Examiner admitted that Shanahan et al. does not disclose or suggest these features, but alleged that Fernley et al. discloses these features of claim 1 (final Office Action, pg. 4). Applicants submit that the disclosure of Fernley et al. provides *no support for the Examiner's allegation.*

Fernley et al. discloses that words in a query phrase are weighted based on the words' relative position within the query phrase and that words in a document are weighted based on the words' relative

position within the document (paras. 70 and 75). Fernley et al. also discloses that the weights of corresponding words are multiplied and then added together to provide a total positional weight sum for each document (para. 76). Even assuming, for the sake of argument, that a weight can reasonably correspond to a score, nowhere does Fernley et al. disclose or suggest assigning weights to sentence endings. Rather, Fernley et al. discloses assigning a weight to a word in a query phrase based on the word's position within the query phrase and assigning a weight to a word in a document based on the word's position within the document (paras. 70 and 75). Fernley et al. does not disclose or suggest that these words are sentence endings that include text that is located within identified sentences between a text fragment and an end of the identified sentences. Thus, Fernley et al. does not disclose or suggest assigning scores to sentence endings, which include text that is located within identified sentences between a text fragment and an end of the identified sentences, based, at least in part, on a location within the identified sentences at which the text fragment occurs, as recited in claim 1.

Even assuming, for the sake of argument, that the words within the query phrase and/or within a document can reasonably correspond to sentence endings and a weight can reasonably correspond to a score, Fernley et al. does not disclose or suggest that weights are assigned to the words based, at least in part, on a location within identified sentences at which a text fragment occurs. Rather, Fernley et al. discloses assigning a weight to a word in a query phrase based on the word's position within the query phrase and assigning a weight to a word in a document based on the word's position within the document (paras. 70 and 75). Thus, Fernley et al. does not disclose or suggest assigning scores to sentence endings, which include text that is located within identified sentences between a text fragment and an end of the identified sentences, based, at least in part, on a location within the identified sentences at which the text fragment occurs, as recited in claim 1. Therefore, the Examiner's rejection is *incomplete*.

For at least these reasons and the reasons given in the After Final Request for Reconsideration, filed June 10, 2008 (e.g., pgs. 2-6), Applicants submit that claim 1 is patentable over Shanahan et al. and Fernley et al., whether taken alone or in any reasonable combination.

With regard to claim 30, Shanahan et al. and Fernley et al. do not disclose or suggest means for assigning scores to sentence endings, associated with located sentences within documents that include at least some of a text fragment, based, at least in part, on a measure of popularity associated with the sentence endings, as recited in claim 30. The Examiner admitted that Shanahan et al. does not disclose or suggest these features, but alleged that Fernley et al. discloses these features of claim 30 (final Office Action, pg. 14). Applicants submit that the disclosure of Fernley et al. provides *no support for the Examiner's allegation*.

Fernley et al. discloses that words in a query phrase are weighted based on the words' relative position within the query phrase (para. 70) and that words in a document are weighted based on the words' relative position within the document (para. 75). Fernley et al. discloses that the weights of

corresponding words are multiplied and then added together to provide a total positional weight sum for each document (para. 76). Nowhere in connection with Fig. 2, or elsewhere, does Fernley et al. disclose or suggest <u>means for assigning scores to sentence endings</u>, associated with located sentences within documents that include at least some of a text fragment, based, at least in part, on a measure of popularity associated with the sentence endings, as recited in claim 30. Rather, Fernley et al. discloses assigning a weight to a word in a query phrase based on the word's position within the query phrase and assigning a weight to a word in a document based on the word's position within the document (paras. 70 and 75). Fernley et al. does not disclose or suggest that these words are sentence endings associated with located sentences within documents that include at least some of a text fragment. Thus, Fernley et al. does not disclose or suggest means for assigning scores to sentence endings, associated with located sentences within documents that include at least some of a text fragment, based, at least in part, on a measure of popularity associated with the sentence endings, as recited in claim 30.

Even assuming, for the sake of argument, that the words within the query phrase and/or within a document can reasonably correspond to sentence endings and that a weight can reasonably correspond to a score, Fernley et al. does not disclose or suggest that weights are assigned <u>to the words</u> based, at least in part, on <u>a measure of popularity associated with the words</u>. Rather, Fernley et al. discloses assigning a weight to a word in a query phrase based on <u>the word's position</u> within the query phrase and assigning a weight to a word in a document based on <u>the word's position</u> within the document (paras. 70 and 75). Thus, Fernley et al. does not disclose or suggest means for assigning scores to sentence endings, associated with located sentences within documents that include at least some of a text fragment, based, at least in part, on a measure of popularity associated with the sentence endings, as recited in claim 30.

At para. 47, Fernley et al. discloses that a document keyword is given a relevance weighting dependent on the number of times that the keyword occurs in a group of sentences. Nowhere in this section, or elsewhere, does Fernley et al. disclose or suggest that a document keyword is a sentence ending associated with a located sentence within documents that include at least some of a text fragment. Rather, Fernley et al. simply discloses a relevance weighting that depends on the number of times that a keyword occurs in a group of sentences. Thus, Fernley et al. does not disclose or suggest means for assigning scores to sentence endings, associated with located sentences within documents that include at least some of a text fragment, based, at least in part, on a measure of popularity associated with the sentence endings, as recited in claim 30.

For at least these reasons and the reasons given in the After Final Request for Reconsideration, filed June 10, 2008 (e.g., pgs. 6-9), Applicants submit that claim 30 is patentable over Shanahan et al. and Fernley et al., whether taken alone or in any reasonable combination.

With regard to claim 31, Applicants note that the Examiner rejected claim 31 based on a combination of Shanahan et al. and Fernley et al. In the body of the rejection, however, the Examiner

appears to allege that Shanahan et al. anticipates claim 31, by alleging that Shanahan et al. discloses all of the features of claim 31 (final Office Action, pgs. 14-15). The Examiner did not rely on any portion of Fernley et al. and did not provide any reason for combining the disclosures of Shanahan et al. and Fernley et al. *Thus, the Examiner did not establish a prima facie case of obviousness under 35 U.S.C. § 103.*

Nevertheless, Shanahan et al. and Fernley et al. do not disclose or suggest one or more servers that are configured to trim one of the sentence completions, associated with located sentences within documents that are associated with a text fragment, by dropping one or more words from the one of the sentence completions, as recited in claim 31. The Examiner alleged that Shanahan et al. discloses trimming at least one sentence ending by dropping one or more words from the at least one sentence ending (final Office Action, pg. 15). Applicants submit that the disclosure of Shanahan et al. provides *no support for the Examiner's allegation*.

At col. 60, lines 41-57, Shanahan et al. discloses that entries offered to the user may be a single word, all words to the end of a sentence, or all words to the end of a paragraph. Shanahan et al. also discloses that snippets/segments of the document from where the suggested completions were extracted can be provided in a separate sub-window. Nowhere does Shanahan et al. disclose or remotely suggest trimming a sentence completion. Rather, Shanahan et al. merely discloses providing context for a completion of an entity fragment by providing a snippet/segment of the document from which the completion was extracted. Thus, Shanahan et al. does not disclose or suggest one or more servers that are configured to trim a sentence completion by dropping one or more words from the sentence completion, as recited in claim 31.

At col. 57, lines 60-62, Shanahan et al. discloses that the auto-completion system can ignore words and phrases that rarely occur, and omit these words and phrases from the auto-completion entity database (col. 57, lines 43-49). Nowhere does Shanahan et al. disclose or remotely suggest trimming a sentence completion. Rather, Shanahan et al. merely discloses omitting rare words and phrases from an auto-completion entity database. Thus, Shanahan et al. does not disclose or suggest one or more servers that are configured to trim a sentence completion by dropping one or more words from the sentence completion, as recited in claim 31.

The Examiner alleged that "cutting to a phrase completion from sentence require dropping" (final Office Action, pg. 15). The Examiner appears to be alleging that Shanahan et al. discloses determining sentence completions and then cutting these sentence completions to phrase completions. There is absolutely no support for this allegation in the disclosure of Shanahan et al. for at least the reasons given in the After Final Request for Reconsideration, filed June 10, 2008 (e.g., pg. 12).

For at least these reasons and the reasons given in the After Final Request for Reconsideration, filed June 10, 2008 (e.g., pgs. 9-12), Applicants submit that claim 31 is patentable over Shanahan et al. and Fernley et al., whether taken alone or in any reasonable combination.

With regard to claim 41, <u>Shanahan et al.</u> and <u>Veale</u> do not disclose or suggest a processor that is configured to merge at least two sentence completions, associated with identified sentences within documents that include at least a portion of a fragment of text, to form a single merged sentence completion, as recited in claim 41. The Examiner admitted that <u>Shanahan et al.</u> does not disclose or suggest these features, but alleged that <u>Veale</u> discloses these features of claim 41 (final Office Action, pg. 18). Applicants submit that the disclosure of <u>Veale</u> provides *no support for the Examiner's allegation*.

At col. 21, line 35 - col. 22, line 7, <u>Veale</u> discloses that a composite answer is produced by combining answer fragments into a single answer. <u>Veale</u> discloses combining multiple, partial answers to form a more complete single answer (col. 22, lines 60-62). <u>Veale</u> provides an example of a composite answer at col. 22, lines 1-7. <u>Veale</u> does not disclose or suggest sentence completions that include text located within identified sentences between at least a portion of a fragment of text and an end of the identified sentences. Rather, <u>Veale</u> discloses composite answers constructed from multiple partial answers. Thus, <u>Veale</u> does not disclose or suggest a processor that is configured to merge at least two sentence completions, associated with identified sentences within documents that include at least a portion of a fragment of text, to form a single merged sentence completion, as recited in claim 41.

For at least these reasons, Applicants submit that claim 41 is patentable over <u>Shanahan et al.</u> and <u>Veale</u>, whether taken alone or in any reasonable combination.

The disclosure of the other applied reference, namely <u>Risvik</u>, does not cure the deficiencies that exist in the disclosures of <u>Shanahan et al.</u>, <u>Fernley et al.</u>, and/or <u>Veale</u>.

In view of the foregoing remarks, Applicants submit that clear deficiencies exist with respect to the rejections of claims 1-7, 9-19, 21, 22, 24-32, 41, 43, and 44. Therefore, Applicants respectfully request withdrawal of the outstanding rejections and the timely allowance of the pending claims.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-1070 and please credit any excess fees to such deposit account.

Respectfully submitted,

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